

DOCUMENT RESUME

ED 345 343

EA 023 925

TITLE A Report to the Governor and the State Legislature on the Relationship between Instructional Expense and Approved Operating Expense.

INSTITUTION New York State Education Department, Albany. Fiscal Analysis and Services Unit.

PUB DATE Mar 92

NOTE 42p.

PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS *Definitions; Elementary Secondary Education; Expenditure per Student; *Expenditures; *Instruction; *School District Spending; *State Aid

IDENTIFIERS *Funding Formulas; *New York

ABSTRACT

Prepared in response to Section 3602 of New York State Education Law, this report analyzes the relationship between approved operating expense (AOE) and instructional expense (IE) for 1990-91. Originally defined as a net aidable expense for dispensing operating aid to school districts, AOE's definition and use have been considerably modified over time. IE, an alternative direct institutional cost measure developed and defined in law in 1990, attempts to measure the direct instructional portion of a district's overall spending. The study concludes that AOE was created to reflect both instructional and noninstructional expenses not otherwise funded outside of operating aid. Since AOE is calculated by deducting certain expenses, its consistency can be dramatically affected by certain one-time, noninstructional deductions. IE accounted for 70 percent of total (unadjusted) expenditures statewide. Although IE and AOE were highly similar, the spending per pupil difference between IE and AOE increased with increasing district wealth. IE as a percent of total adjusted expenditure remained relatively flat as district size increased, whereas AOE generally increased with district size. When both IE and AOE were expressed as a percent of total adjusted expenditures, the AOE percent increased with district wealth. Preliminary evidence suggests that IE represents a useful measure of instructional cost. Included are a list of policy issues, a glossary, and appendices containing statutory definitions, regulations, methodology, and data tables. (MLH)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

EA

ED345343

A Report to the Governor and the State Legislature
on
THE RELATIONSHIP BETWEEN INSTRUCTIONAL EXPENSE AND
APPROVED OPERATING EXPENSE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.
☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

R. Zombly

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

March 1992

The University of the State of New York
The State Education Department
Fiscal Analysis and Services Unit
Albany, NY 12234

EA 023 925

TABLE OF CONTENTS

LIST OF CHARTS	ii
LIST OF TABLES	iii
FOREWORD	iv
EXECUTIVE SUMMARY	v
BACKGROUND	1
DEFINITIONAL COMPARISON	1
ANALYSIS OF INSTRUCTIONAL EXPENSE BY EXPENDITURE CATEGORIES AND AS A PERCENT OF TOTAL EXPENDITURES	4
ANALYSIS BASED ON RANK-ORDER DISTRIBUTION	4
BIG FIVE CITY SCHOOL DISTRICTS	14
CONCLUSION	15
POLICY ISSUES	17
GLOSSARY	18
APPENDICES	20
- Appendix 1: Statutory Definitions (Ed. Law, Section 3602)	20
- Appendix 1A: Commissioner's Regulations, Sect. 175.39	22
- Appendix 2: Methodology	24
- Appendix 3: Data Tables	25

LIST OF CHARTS

CHART 1:	Instructional Expense vs. Approved Operating Expense: Definitional Similarities and Differences	3
CHART 2:	1990-91 Total Expenditures by Function	5
CHART 3:	1990-91 Instructional Expense by Type of Expenditure	5
CHART 4:	1990-91 Expense Per Pupil, Rank-Ordered on Enrollment	6
	Chart 4D: Downstate Districts	7
	Chart 4U: Upstate Districts	7
CHART 5:	1990-91 Expense Per Pupil, Rank-Ordered on Wealth	8
	Chart 5D: Downstate Districts	9
	Chart 5U: Upstate Districts	9
CHART 6:	1990-91 Expense as a Percent of Total Adjusted Expenditures, Rank-Ordered on Enrollment	10
	Chart 6D: Downstate Districts	11
	Chart 6U: Upstate Districts	11
CHART 7:	1990-91 Expense as a Percent of Total Adjusted Expenditures, Rank-Ordered on Wealth	12
	Chart 7D: Downstate Districts	13
	Chart 7U: Upstate Districts	13

LIST OF TABLES

TABLE 1:	Analysis of Approved Operating Expense and Instructional Expense 1990-91, Ranked on Total Aidable Pupil Units	26
	TABLE 1-D: Downstate Districts	27
	TABLE 1-U: Upstate Districts	27
TABLE 2:	Analysis of Approved Operating Expense and Instructional Expense 1990-91, Ranked on Modified Combined Wealth Ratio	28
	TABLE 2-D: Downstate Districts	29
	TABLE 2-U: Upstate Districts	29

FOREWORD

Section 3602 of Education Law was amended in 1990 to include the following subdivision:

11-a. Instructional expense. a. "Instructional expense" shall mean the sum of all base year expenditures related to the instructional program of the district, as defined in regulations of the commissioner, including the cost of fringe benefits paid by such district for the instructional staff of the district.

b. Commencing with the nineteen hundred ninety-one--ninety-two school year, school districts shall annually report instructional expense in the manner prescribed by the commissioner. By March first, nineteen hundred ninety-two, the commissioner shall report to the governor and the legislature on the relationship between instructional expense and approved operating expense in the nineteen hundred ninety--ninety-one school year.

This report was prepared in response to the statutory directive. However, the deadline for submission of the report required the use of data from files which were not completely edited. As a result, data for 16 districts, including New York City, were estimated from the previous year's reports.

EXECUTIVE SUMMARY

This report was prepared in response to the requirements of subdivision 11-a of Section 3602 of Education Law, which calls for an analysis of the relationship between Approved Operating Expense and Instructional Expense.

Approved Operating Expense has been used in State Aid formulas in New York State since 1962. It was originally created as a net, aidable expense for Operating Aid and excluded expenses aided through other aid formulas. It was designed to permit the State to share in a district's operating expenses — many of which were noninstructional in nature.

Because the definition of Approved Operating Expense has changed since its inception, there is a question whether it now represents what it was intended to represent. Even more to the point, Approved Operating Expense is no longer used for Operating Aid but now serves as a proxy for program cost in specific aid computations: Public Excess Cost aid, Supplemental Support aid, and Employment Preparation Education aid.

Instructional Expense, in contrast, is designed to measure the direct costs of a district's instructional program; it excludes noninstructional costs. Instructional Expense was established through an amendment to Education Law in 1990 and was subsequently promulgated in Commissioner's Regulations. To address the 1990 legislative mandate, school districts were directed to report their expenditures according to the new definition of Instructional Expense in addition to their traditional reporting of Approved Operating Expense data.

The calculation of Approved Operating Expense is defined in subdivision 11 of Section 3602 of Education Law. That calculation subtracts, from the total General Fund expenses of a school district, expenses that are aided through other formulas, certain revenues which offset expenses, and nonreimbursable expenses.

The calculation of Instructional Expense, defined in subdivision 11-a of Section 3602 of Education Law, requires, not subtraction from a total, as with Approved Operating Expense, but the addition of expenses for budget items which are identified in the Commissioner's Regulations as instructional plus a prorated share of fringe benefit expenses as required by the statutory definition. Examples of the expenses included are: teachers' salaries, other instructional salaries, fringe benefits related to instruction, tuition expenditures, Special Aid Fund instructional expenditures, and other expenditures related to instruction, including BOCES instructional expenditures.

This report presents limited comparisons of the two expense measures, their definitions, and the difference between them when calculated upon the same data. Findings of the comparisons are presented in three ways, by grouping the two measures according to: a) district size, b) district wealth, and c) geographic location (upstate and downstate groupings).

Report Findings

Definitions: The degree of overlap in the definitions of Instructional Expense and Approved Operating Expense is quite great (Chart 1). However, the definition of Approved Operating Expense has changed frequently over the years and therefore produces inconsistencies over time, whereas the definition of Instructional Expense can be expected to remain relatively constant.

Expense by Function and Type: Instructional Expense accounts for over 70 percent of Total Expenditures (Chart 2); Teachers Salaries account for over 55 percent of Instructional Expense (Chart 3). Because Approved Operating Expense is computed by subtracting categories from a total instead of adding categories together, category shares cannot be computed for Approved Operating Expense.

Analysis by Rank-Order on Size, Wealth, and Location: When the districts were ranked according to enrollment size and wealth, the per pupil measures of Instructional Expense and Approved Operating Expense followed a similar pattern (Charts 4 and 5). However, when considered as a percent of total adjusted expenditures (total expenditures minus debt service), Instructional Expense and Approved Operating Expense behaved differently in regard to size and location (Downstate/Upstate), and in regard to wealth statewide (Charts 6 and 7).

Big Five Cities Analysis: On both measures, the Big Five Cities (Buffalo, Rochester, New York City, Syracuse, and Yonkers) were slightly below the respective State averages. However, for the Big Five Cities, Instructional Expense as a percent of total adjusted per pupil expenditures, was higher than the State average, while Approved Operating Expense was below the State average (Tables 1 and 2).

Conclusions

- ▶ While Instructional Expense and Approved Operating Expense contain a number of similar fiscal categories, the two items can differ widely when used to compare two districts or the same district from year to year.
- ▶ While the expense per pupil figures for both items behave similarly, expense as a percent of total adjusted expenditures shows differences.
- ▶ While Approved Operating Expense is used primarily as a proxy for program cost for aid distribution purposes, Instructional Expense is a more consistent measure of educational program cost.

Based upon the findings reported here, a variety of policy questions worthy of further investigation are also described.

* * * * *

BACKGROUND

The category of Approved Operating Expense (AOE) in Education Law¹ dates back to 1962 and was originally created as a net, aidable expense for Operating Aid purposes. It was calculated by subtracting certain expenses and revenues from a district's Total General Fund Expense. The resulting AOE amount was then divided by an appropriate pupil count and used in determining a district's Operating Aid. AOE was designed to reflect all those aidable operating costs not otherwise aided through school aid formulas. Over the years, the items to be deducted in determining AOE have changed (just as other formulas have changed); additionally, unusual changes in the expense or revenue items to be deducted (such as an unusual change in Federal Impact Aid or a district's one-time revenues from the sale of a building) may contribute to considerable fluctuation in the AOE measure from year to year within the same district.

In 1978-79 a specified ceiling amount per pupil replaced AOE per pupil in the Operating Aid Formula. However, in 1980-81, AOE per pupil was incorporated in the revamped aid formula for children with handicapping conditions. It was used as a proxy for program cost for such children served in district-operated or BOCES programs, with relative cost weightings established for various levels of service. For example, a child receiving special services or programs for 60 percent or more of the school day generates Public Excess Cost aid on the basis of a 1.7 weighting multiplied by the AOE per pupil and by the district's State Aid ratio. The Employment Preparation Education aid formula adopted in 1984-85 incorporated the statewide average AOE per pupil to establish the annual aid ceiling. Here again AOE is used as a proxy for education program cost. Similarly, that is the purpose of using the measure in the Supplemental Support aid formula.

DEFINITIONAL COMPARISON

The definition of AOE has been changed several times since its inception. Because of this variability, AOE cannot be compared over time. In addition, the use of only "approved expenses" in the calculation of AOE makes it impossible to compute directly from the Annual Financial Report for School Districts (Form ST-3).

In contrast to AOE, Instructional Expense (IE) was designed to measure a district's instructional costs rather than to represent net aidable expenses. Operationally, it is calculated as the sum of selected expenditure categories from **both** the General and Special Aid Funds that are explicitly defined as instructional expenses in the Commissioner's Regulations.¹ It also includes a proration of total fringe benefits which are attributable to these expenses. IE can be calculated directly from the data in the ST-3 using a proration formula for fringe benefits.

¹ See Appendices 1 and 1A for the current legal definitions of Approved Operating Expense and Instructional Expense.

Chart 1 illustrates: 1) expenses common to IE and AOE (upper-left box), which account for over 80 percent of AOE and almost 95 percent of IE; 2) expenses contained in IE but not contained in AOE (upper-right box); 3) expenses not contained in IE but contained in AOE (the lower-left box); and 4) expenses which are omitted from both measures (lower-right box).

The boxes of particular interest in this study are the lower-left and upper-right boxes. These boxes, which contain revenue and expenditure categories that are part of one computation but absent from the other, are helpful in accounting for observed differences between the two measures. Information displayed in the upper-right box of Chart 1, for instance, suggests some plausible explanations why certain districts may have a relatively high percentage of their overall spending in IE but a relatively low percentage in AOE. These districts probably share one or more of the following characteristics: high tuition expenditures, high BOCES expense for instruction other than Special Education, or large categorical aid grants for instruction recorded in the Special Aid Fund rather than the General Fund. In every instance, these expenditure items would serve to increase IE but *not* AOE.

Conversely, for districts with relatively high AOE and relatively low IE as a percent of overall spending, the lower-left box of Chart 1 suggests substantial capital investments in building or transportation programs in excess of approved levels or higher-than-average costs for building operation and maintenance or central administration. Operation and Maintenance expenses and Central Administration expenses, for example, account for 7.8 percent and 2.5 percent respectively of Total Expenditures statewide; these expenditures are included in AOE and in total adjusted expenditures, but not in IE.

This definitional comparison helps to explain the relative year to year consistency of IE. The major component of IE, Teachers' Salaries, is consistent by definition. AOE is less consistent because of differences in legal definition, accounting practices related to receipt of Federal revenues, and the one-time nature of certain revenue deductions currently used in its calculation. Changes in IE better reflect changes in instructional program cost.

CHART 1

INSTRUCTIONAL EXPENSE VS. APPROVED OPERATING EXPENSE DEFINITIONAL SIMILARITIES AND DIFFERENCES

APPROVED OPERATING EXPENSE (AOE)

		IN (AOE)	OUT (of AOE)		
INSTRUCTIONAL EXPENSE (IE)	IN (IE)	TEACHERS' SALARIES OTHER SALARIES (Related to Instr.) BOCES Instr. Exp. (Special Ed.) FRINGE BENEFITS (Related to Instr.) OTHER EXP. ^{a/} (Related to Instr.)	TUITION EXP. BOCES Instr. Exp. (other than Spec. Ed.) INSTRUCTIONAL EXP. (Special Aid Fund) All REVENUE DEDUCTS	IN (IE)	
	OUT (of IE)	GENERAL SUPPORT -Cent. Admin. -Oper. & Maint. FRINGE BENEFITS (other than Instr.) OTHER INSTR. EXP. -Pre-K Salaries -Health Services -Co-Curricular Act. -Interschol. Athletics UNAPPR. CATEGORICAL EXP. TRANSFER TO CAP. FUND COMMUNITY SERVICES INTEREST on Short-Term Notes ^{b/}	TRANSPORTATION Most INTERFUND TRANSFERS BOCES EXP. (other than Instr.) Most DEBT SERVICE ^{b/}	OUT (of IE)	OUT (of AOE)
		IN (AOE)			

^{a/} Except as appears in box below.

^{b/} All Debt Service is excluded from total adjusted expenditures.

ANALYSIS OF INSTRUCTIONAL EXPENSE BY EXPENDITURE CATEGORY AND AS A PERCENT OF TOTAL EXPENDITURES

A conventional approach to cost analysis is to examine particular expenses as a percent of the total expenditure pie. Chart 2 presents IE in relation to total expenditures and Chart 3 displays the various components of IE. Chart 2 shows that in 1990-91 IE accounted for 70 percent of total school district expenditures statewide. Chart 3 shows that teacher salaries accounted for over half of IE. In addition, other instructional salaries (e.g., those related to Pupil Personnel Services or Instructional Supervision) and the estimated Fringe Benefits for all instructional staff accounted for about twenty-five percent of IE. AOE amounted to 78.2 percent of total (unadjusted) expenditures; percent shares of categories composing AOE cannot be computed.²

ANALYSIS BASED ON RANK-ORDER DISTRIBUTIONS

To explore further the similarities and differences between IE and AOE, a variety of analyses were carried out, designed to assess the similarity of IE and AOE when associated with certain other measures. The data were rank-ordered on enrollment size and on wealth and then broken into ten groups containing equal numbers of districts; however, the ranges of size or wealth of these district groups varied widely. The tables in Appendix 3 display IE and AOE measures as an expenditure per pupil and as a percent of a district's total adjusted expenditures.

In order to determine whether AOE or IE varied with size (Table 1), size by location (Tables 1-D and 1-U), wealth (Table 2), or wealth by location (Tables 2-D and 2-U), all districts except for the Big Five Cities³ were rank-ordered from low to high on each indicator and then displayed in ten equal-sized groups. Each of the ten groups in Tables 1 and 2 (Total State) contained 68 or 69 districts. Tables 1-U and 2-U reflect only the Upstate⁴ districts, and the groups shown each contained about 51 districts; in Tables 1-D and 2-D for the Downstate⁴ districts, the groups had 17 or 18 districts each. The charts that follow were derived from the data contained in these tables; each data point shown in a trend line is the average for a data group formed after ranking the data on a specific indicator. The Big Five Cities were analyzed separately (see page 14).

² In addition, AOE cannot be viewed as a sum total of expense categories, mainly because revenue deductions are involved in the calculation.

³ New York City, Buffalo, Rochester, Syracuse, and Yonkers city school districts (1,247,802 pupils).

⁴ Downstate districts (177 districts; 629,250 pupils) are located in the Counties of Nassau, Putnam, Rockland, Suffolk, and Westchester (except Yonkers). The remaining districts (exclusive of the Big Five) are in the Upstate district group (511 districts; 1,149,957 pupils).

Chart 2
1990-91 Total Expenditures by Function*

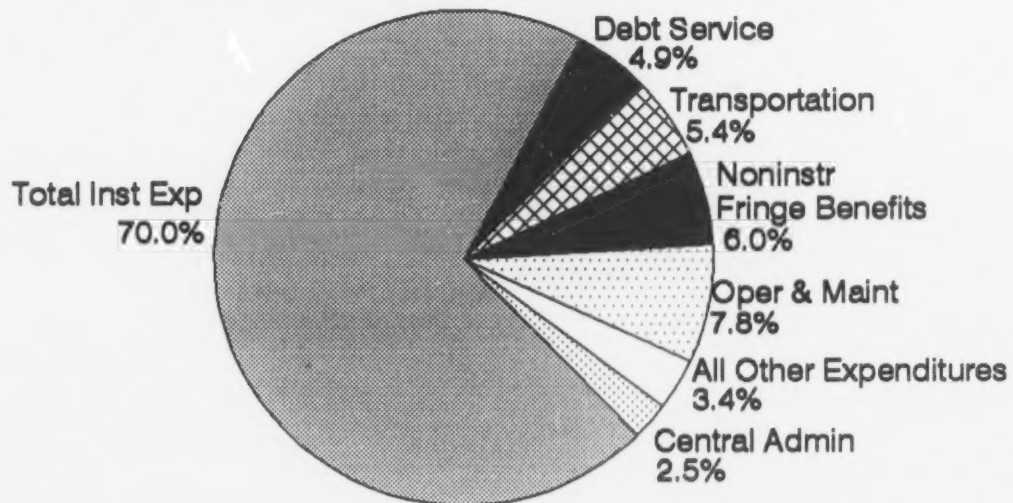
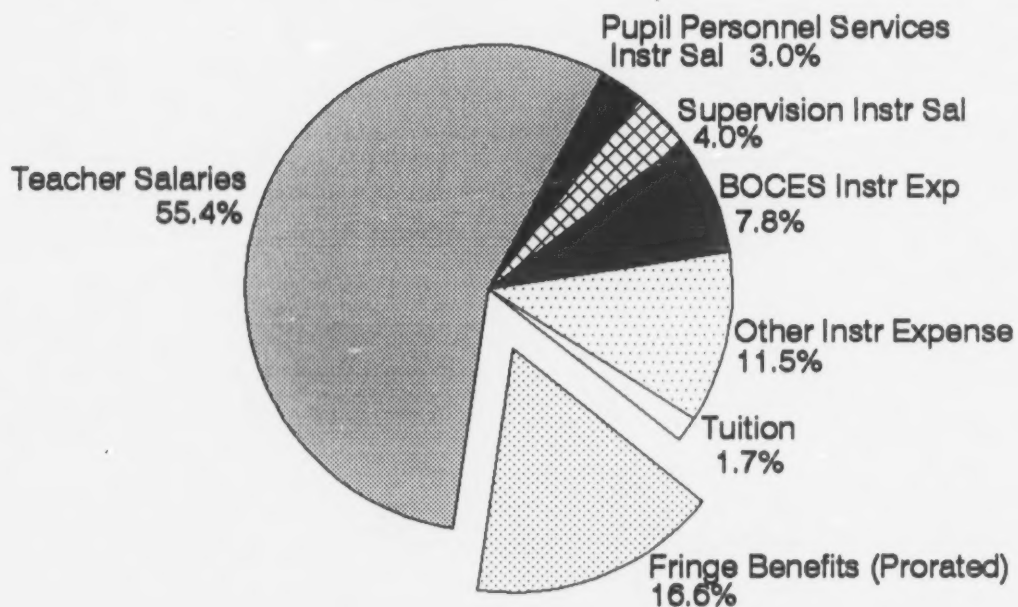


Chart 3
1990-91 Instructional Expense
by Type of Expenditure*



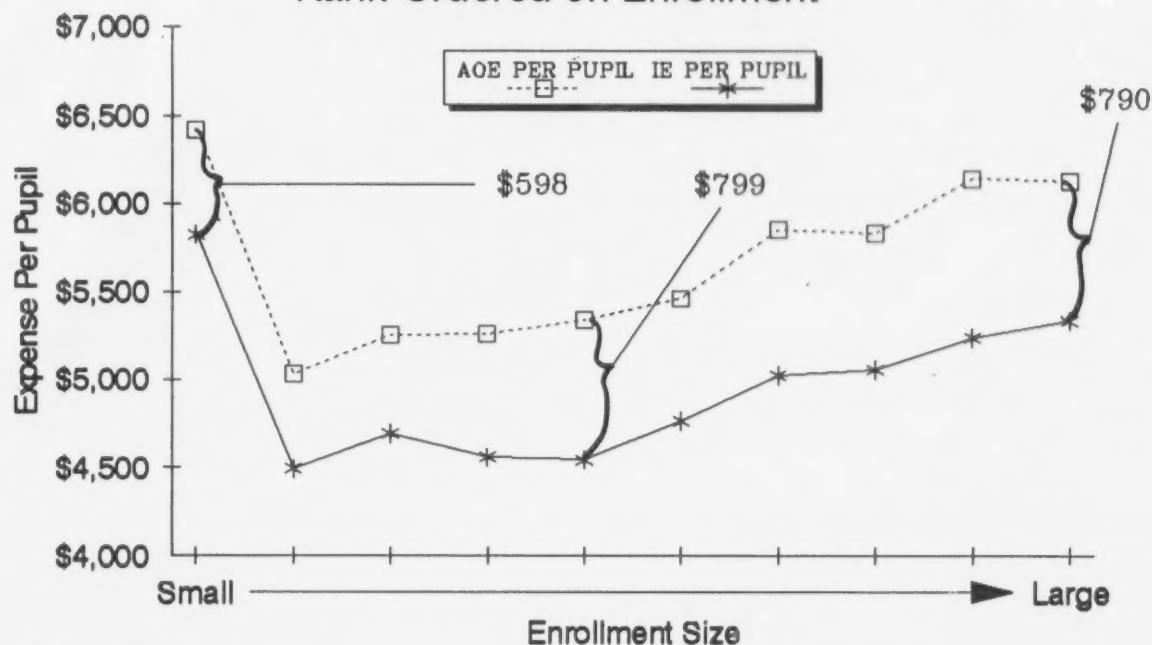
*Note: Data exclude districts with incomplete reporting, including New York City (see Appendix 2, footnote 8)

Analysis of IE and AOE Per Pupil

As Chart 4 demonstrates, when IE and AOE per pupil were related to district enrollment, both measures behaved the same. The districts in the smallest size group in Chart 4 (average enrollment of about 300) had per-pupil costs on both measures that were substantially higher than statewide averages, (where the average enrollment was about 650 students). In each successive group, except for the very smallest, both expense measures generally increased with increased district size. Additionally, since AOE per pupil increased at a slightly faster rate than IE per pupil in the first five size groups, the dollar per pupil difference between these two measures increased somewhat up to district sizes of 1,800 pupils, after which the differences remained constant. While the patterns of Chart 4D and 4U differ from each other, the two measures behaved similarly in both Downstate and Upstate districts.

In summary, when the IE and AOE per pupil measures are related to district size and geographic region, the two measures behave in a parallel fashion.

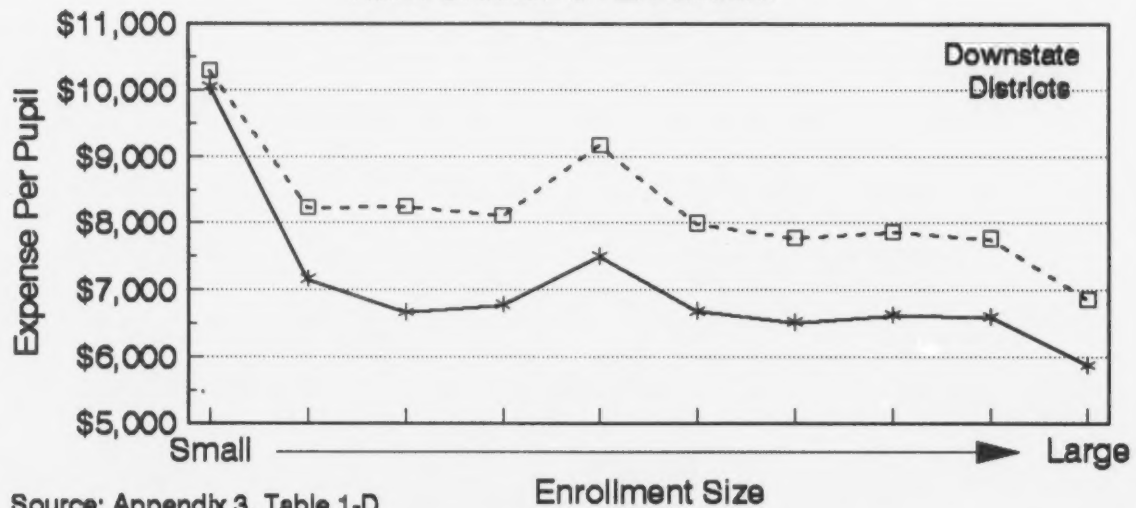
Chart 4
1990-91 Expense Per Pupil
Rank-Ordered on Enrollment



Source: Appendix 3, Table 1

Average Expense Per Pupil	Downstate	Upstate	Big 5 Cities	Total State
Instructional Expense	\$6,506	\$4,308	\$4,813	\$4,973
Approved Operating Exp.	7,703	4,864	5,103	5,553

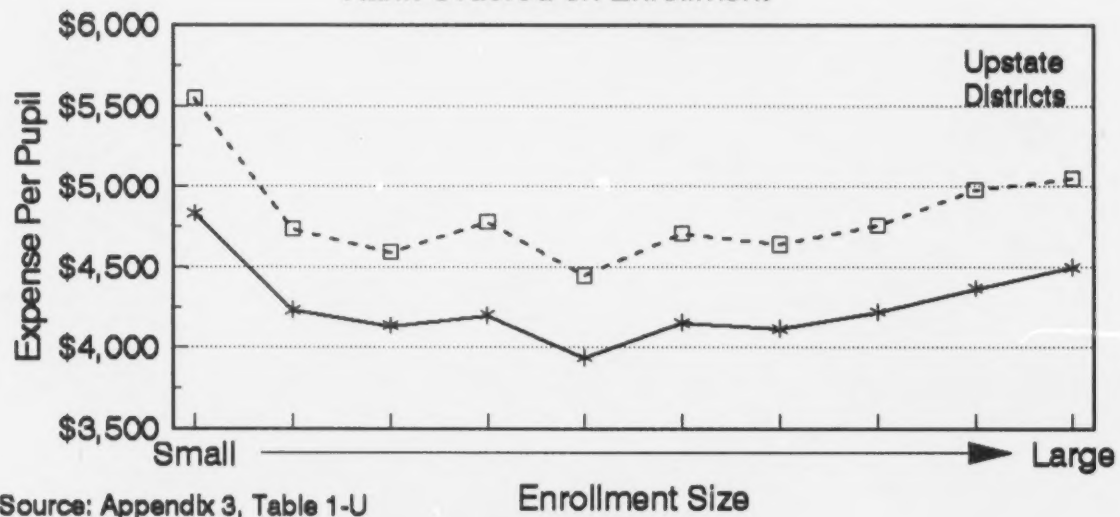
CHART 4D
1990-91 Expense Per Pupil
Rank-Ordered on Enrollment



Source: Appendix 3, Table 1-D

AOE PER PUPIL IE PER PUPIL

CHART 4U
1990-91 Expense Per Pupil
Rank-Ordered on Enrollment

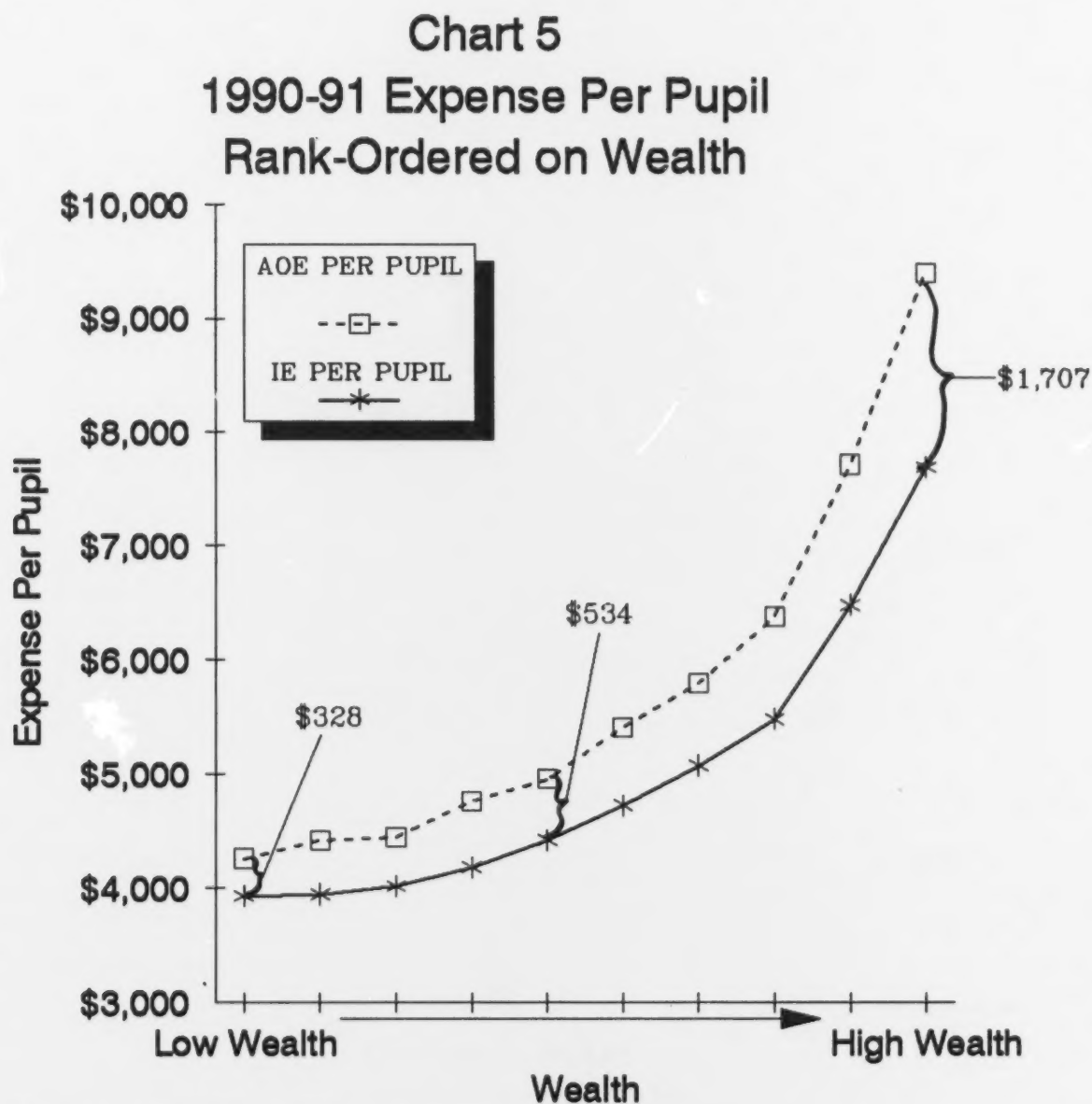


Source: Appendix 3, Table 1-U

AOE PER PUPIL IE PER PUPIL

Chart 5 displays per pupil expense data ranked by school district wealth. While both IE and AOE per pupil increased with district wealth, AOE increased at a slightly faster rate than IE; AOE per pupil was \$328 more than IE per pupil in the lowest wealth group and \$1,707 more in the highest wealth group.

When IE and AOE were examined by wealth and location, the same effects observed statewide were also found. Both Downstate and Upstate districts displayed similar *increasing* trends in per pupil expense as district wealth increased (Charts 5-D and 5-U).



Source: Appendix 3, Table 2

CHART 5D
1990-91 Expense Per Pupil
Rank-Ordered on Wealth

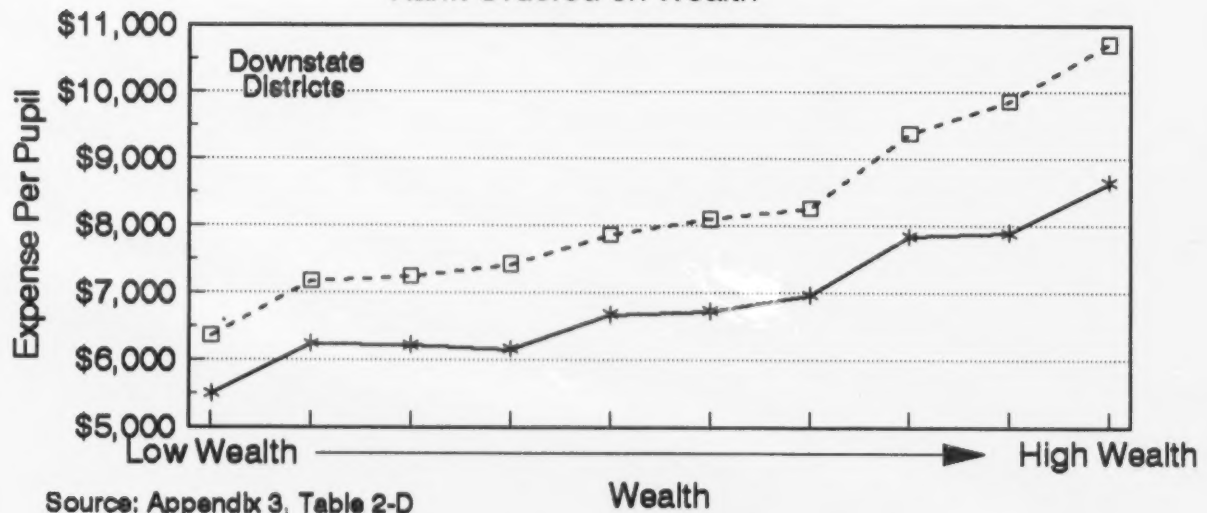
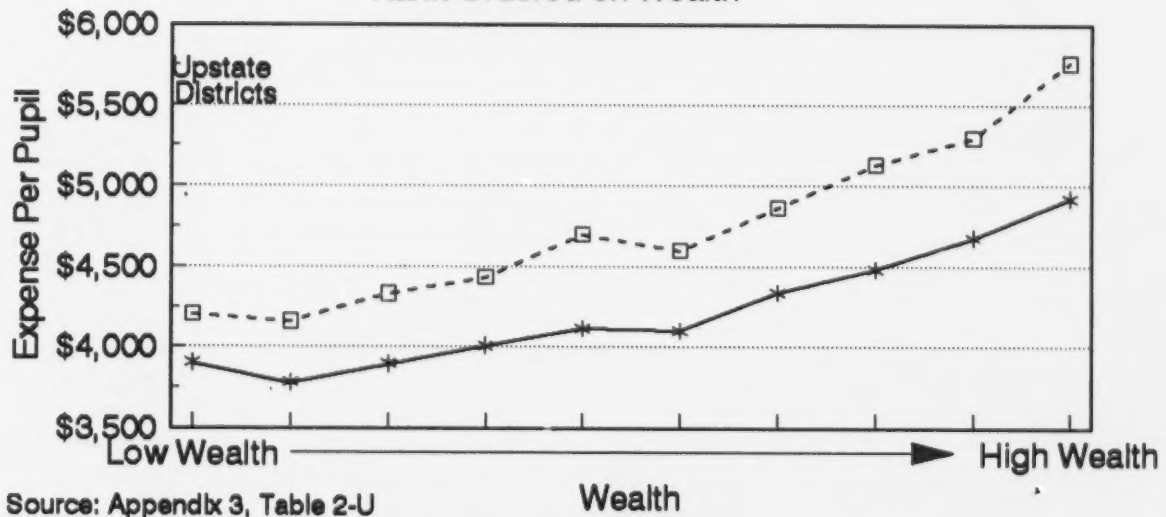


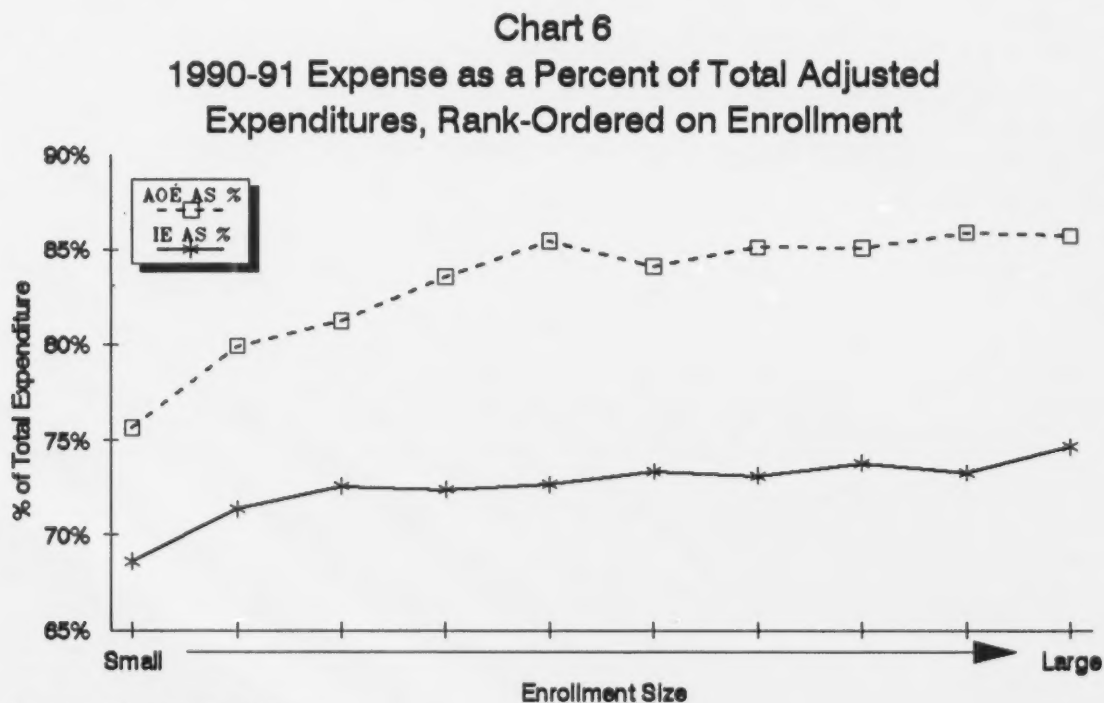
CHART 5U
1990-91 Expense Per Pupil
Rank-Ordered on Wealth



Analysis of IE and AOE Expressed as a Percent of Total Adjusted Expenditures

In Charts 6 and 7, IE and AOE are displayed as a percent of total adjusted expenditures⁵ rather than as per pupil measures. In Chart 6 (rank-ordered on enrollment), the IE and AOE trend lines are roughly parallel; however, the IE percent of total adjusted expenditures produced a relatively flat trend line as district size increased, while the AOE trend line increased somewhat. As a result, with increased enrollment, the *difference* between the two percents became greater. When examined by both size and location (Charts 6D and 6U), the Upstate districts followed the statewide pattern. However, the Downstate districts showed a large early jump in AOE as a percent of total adjusted expenditures while the IE percents stayed relatively flat across district groups of increasing size. IE and AOE expressed as a percent of total adjusted expenditures appear to behave differently when both size and location are considered.

In summary, when IE and AOE as percents of total adjusted expenditures are related to district size and geographic region, some differences are found in the behavior of the two measures.



Source: Appendix 3, Table 1

Average Expense as a Percent of Total Exps.	Downstate	Upstate	Big 5 Cities	Total State
Instructional Expense	73.1%	74.1%	78.5%	75.5%
Approved Operating Exp.	86.5	83.6	83.3	84.3

⁵ Grand Total Expenditures as defined in the *Fiscal Profile Report* minus expenditures for Debt Service. Total Expenditures for Debt Service were excluded because their presence frequently distorts expenditure comparisons.

CHART 6D
1990-91 Expense as a Percent of Total Adjusted
Expenditures, Rank-Ordered on Enrollment

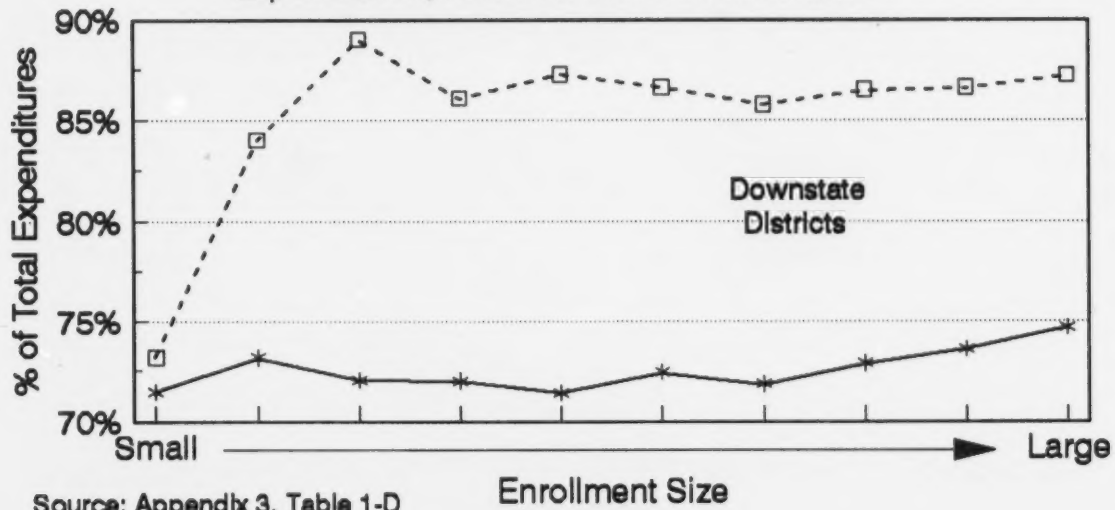
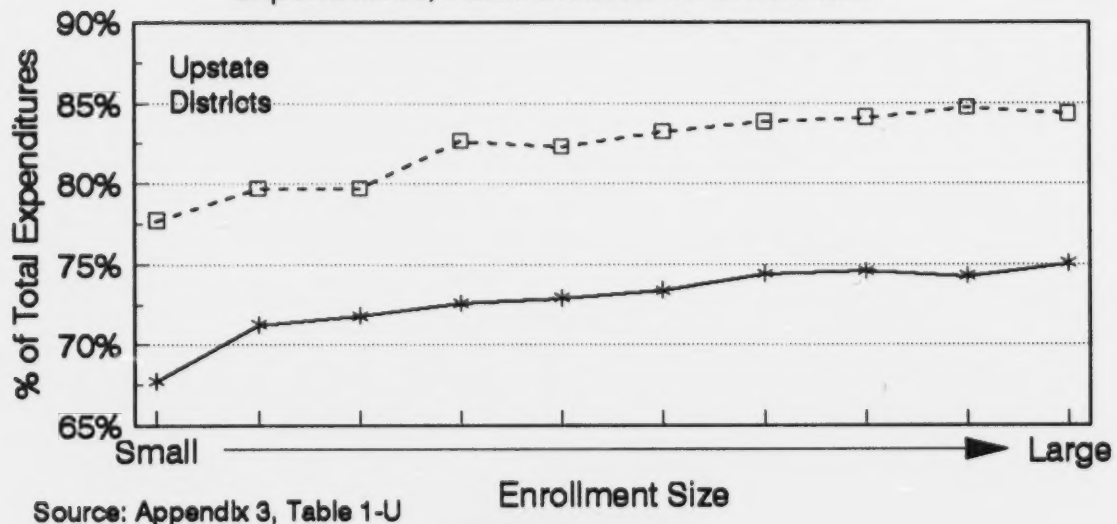


CHART 6U
1990-91 Expense as a Percent of Total Adjusted
Expenditures, Rank-Ordered on Enrollment

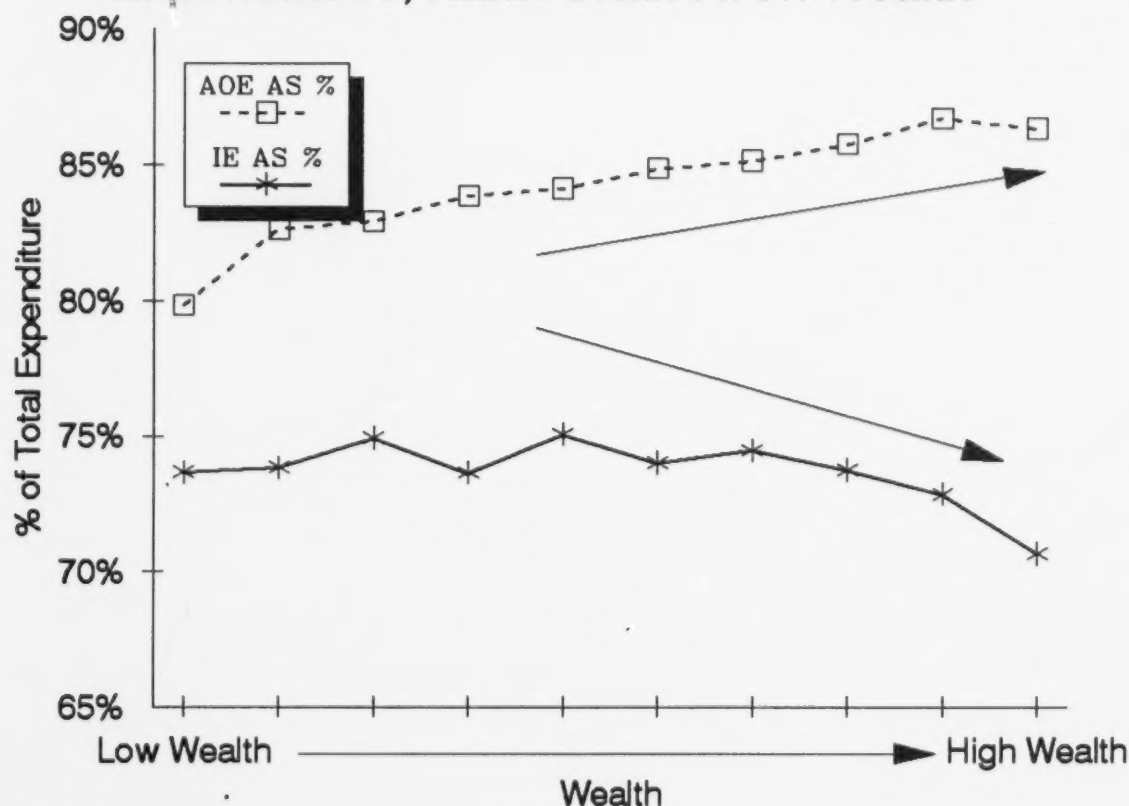


In Chart 7 (rank-ordered on wealth), the trend lines for IE and AOE as a percent of total adjusted expenditures diverged as district wealth increased. The AOE measure increased, while the IE measure decreased slightly (about three percent). Both of these trends became more pronounced toward the wealthier end of the scale.

The Upstate and Downstate analyses by wealth showed different patterns. For the Downstate districts in Chart 7D, the AOE percents were remarkably stable, while the IE percents showed a general *decreasing* trend. For the Upstate districts in Chart 7U, the AOE percents generally *increased* as a function of increasing wealth while the IE percents remained relatively constant (a total variation of slightly over *two* percentage points over the entire range).

Thus, we observe the overall statewide effect of a slightly *increasing* AOE percent trend coupled with a slightly *decreasing* IE trend, and once again we have a difference in the behavior of the two measures.

Chart 7
1990-91 Expense as a Percent of Total Adjusted Expenditures, Rank-Ordered on Wealth



Source: Appendix 3, Table 2

CHART 7D
1990-91 Expense as a Percent of Total Adjusted
Expenditures, Rank-Ordered on Wealth

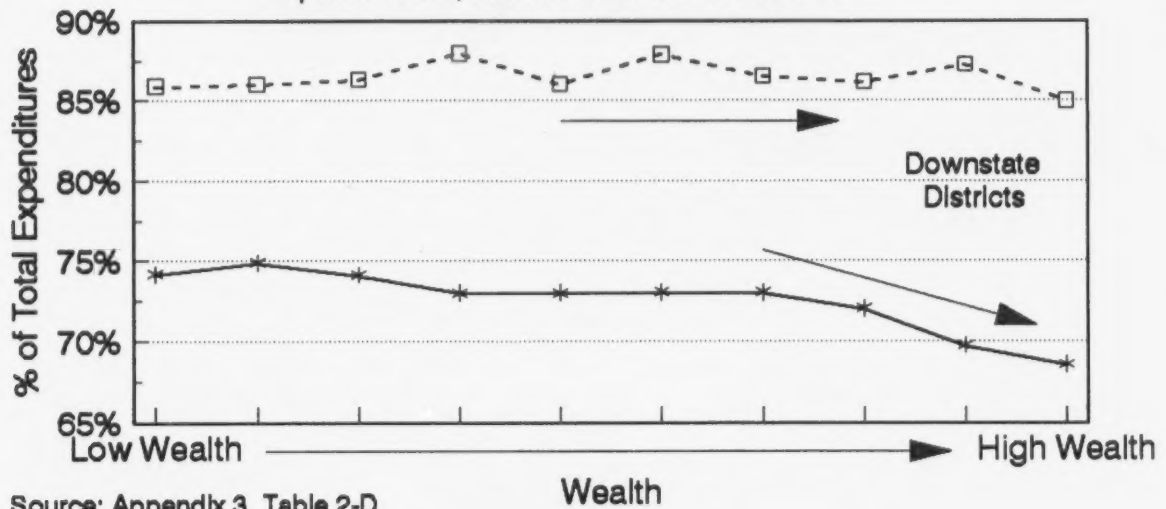
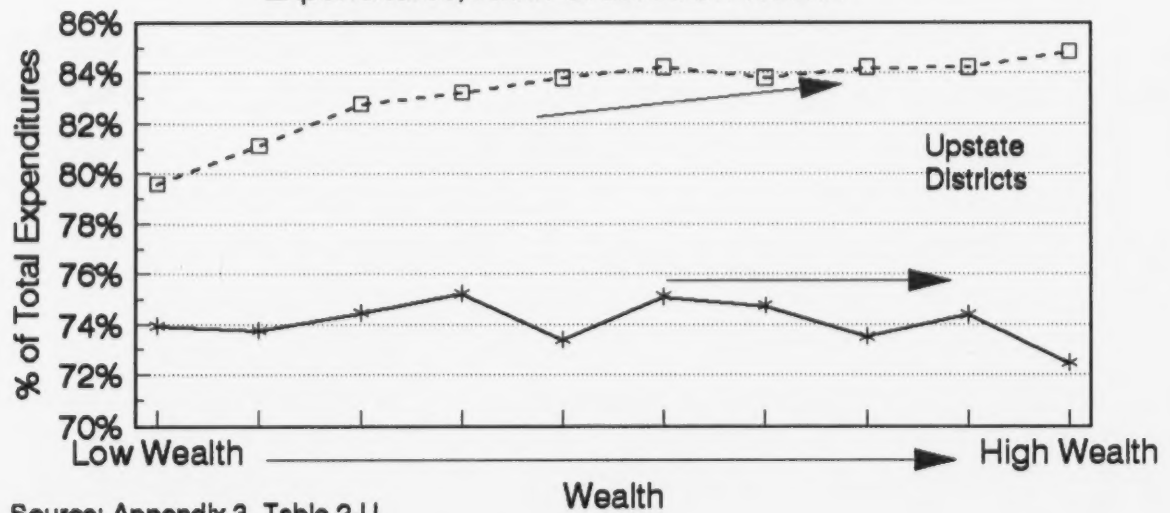


CHART 7U
1990-91 Expense as a Percent of Total Adjusted
Expenditures, Rank-Ordered on Wealth



BIG FIVE CITY SCHOOL DISTRICTS

The five largest school districts in the State are also the five districts which are fiscally dependent on their municipalities. In addition to their size and fiscal dependence, the diversity in the populations they serve creates a complexity which sets these districts apart from other State districts. Therefore, we have analyzed them separately.

The data for the Big Five Cities as a group are displayed below in a repetition of the reference tables from Charts 4 and 6. Depending upon whether we looked at IE or AOE, the data showed differing results. IE and AOE per pupil for the Big Five Cities were both slightly below the respective State averages. For AOE as a percent of total expenditures, the Big Five Cities remained slightly *below* the State average; for IE as a percent of total, the Big Five Cities (at 78.5 percent) were *well above* the State average of 75.5 percent.

Average Expense Per Pupil	Downstate ⁶	Upstate ⁶	Big Five Cities ⁶	Total State
Instructional Expense	\$6,506	\$4,308	\$4,813	\$4,973
Approved Operating Exp.	7,703	4,864	5,103	5,553

Average Expense as a Percent of Total Exps.	Downstate	Upstate	Big Five Cities	Total State
Instructional Expense	73.1%	74.1%	78.5%	75.5%
Approved Operating Exp.	86.5	83.6	83.3	84.3

* * * * *

⁶ Downstate districts (177 districts; 629,250 pupils) are located in the Counties of Nassau, Putnam, Rockland, Suffolk, and Westchester (except Yonkers). The remaining districts (exclusive of the Big Five) are in the Upstate district group (511 districts; 1,149,957 pupils). The Big Five Cities are New York City, Buffalo, Rochester, Syracuse, and Yonkers city school districts (1,247,802 pupils).

CONCLUSION

This report analyzes the relationship between two expenditure measures: Approved Operating Expense (AOE) and Instructional Expense (IE). AOE was originally defined in Education Law almost thirty years ago as a net aidable expense for the purpose of allocating Operating Aid to districts. Over time, however, its definition and use have been considerably modified. IE, an alternative measure of direct instructional cost, was developed and defined in law in 1990 (subdivision 11-a of Section 3602 of Education Law). IE represents an effort to measure the direct instructional portion of a district's overall spending. Prepared in response to statutory direction, this report analyzes the relationship between the two measures for the 1990-91 school year. A number of preliminary conclusions can be advanced, based on this analysis:

- 1) AOE was created to reflect **both** instructional and noninstructional expenses not otherwise aided outside of Operating Aid.
- 2) Since AOE is calculated by deducting certain expenses and revenues from the district's total expenses, its consistency over time at the district level can be dramatically affected by certain one-time deductions associated with the noninstructional portion of a district's operation.
- 3) On the other hand, IE was created to measure a district's direct instructional expenses. Its definition includes specific expenditures related to instructional program. IE was shown to account for 70 percent of total (unadjusted) expenditures statewide (and 79 percent in New York City). Teacher salaries alone represented 55.4 percent of IE and 38.2 percent of total (unadjusted) expenditures.⁷ These findings stand in sharp contrast to the recently reported findings of Cooper et al. (1990), who indicated that total classroom-related expenditures accounted for only 33 percent of New York City's public school expenditures. Further investigation is needed to account for this discrepancy.
- 4) While IE and AOE show a high degree of similarity, some differences between them are noteworthy. The divergent findings were these:
 - a) the spending per pupil *difference* between IE and AOE increased with increasing district wealth;

⁷ This IE percentage for New York City is based upon 1989-90 data, not 1990-91 data, due to the incomplete status of New York City data files for the more current data year at the time of this report. The City's 1989-90 Teachers' Salaries represent 53.5 percent of their Instructional Expense and 40.5 percent of total (unadjusted) expenditures.

b) IE as a percent of total adjusted expenditure remained relatively flat as district size increased. The AOE measure generally increased with district size. Upstate and Downstate patterns generally followed this trend, although Downstate districts displayed an especially pronounced increase in their AOE measure in the second and third smallest size groups;

c) when both IE and AOE were expressed as a percent of total adjusted expenditures, the AOE percents increased with district wealth; this pattern was particularly pronounced in the Upstate districts, while the IE percent trend line remained generally constant. For the Downstate districts, the AOE percents were relatively constant, but the IE data decreased with increasing wealth.

The disparity between IE and AOE in the high wealth districts is consistent with the greater discretionary spending of such districts — particularly in the noninstructional expense components that are included in AOE but not IE.

The preliminary evidence from this analysis suggests that represents a useful measure of instructional program cost; it should permit policymakers to gain a more accurate comparative picture of a district's fiscal investment in education relative to districts of similar size, wealth, and demographic features.

* * * * *

POLICY ISSUES

The analysis undertaken here stimulates a number of critical policy questions which merit further exploration. Possible policy questions include the following:

- 1) If IE appears to be less subject to year-to-year fluctuations, or more stable as a measure of instructional program cost, does this suggest that it may be a more appropriate measure upon which to base aid than AOE? What would the effects be if IE were substituted for AOE in current aid formulas?
- 2) If IE is a truer measure of actual instructional program cost, does this suggest that its use for inter-district comparisons may constitute an improvement over AOE-based calculations?
- 3) For what aid calculations, if any, might AOE continue to be a superior measure?
- 4) What changes in the definitions of both IE and AOE might improve the utility of each?

The State Education Department will continue to pursue these and other questions stimulated by this analysis.

* * * * *

REFERENCES

Cooper, B. S., Sarrel, R., and Tetenbaum, T. "Choice Funding and Pupil Achievement". Paper presented at AERA Meeting; Boston, April 1990.

GLOSSARY

1. Approved Operating Expense (AOE): 1990-91 Approved Operating Expense as extracted from the 1991 State Aid Database as of 1/29/92 (see Appendix 1 for definition).
2. Enrollment: Unless otherwise specified, enrollment or enrollment size refers to 1990-91 TAPU for Expense (see definition in this section).
3. Fringe Benefits: Section 3602 of Education Law requires the calculation of instructional expense to include "the cost of fringe benefits paid by . . . (a) district for the instructional staff of the district." Because fringe benefits are reported in the General Fund of the ST-3 by benefit category (i.e., retirement, FICA, Health Insurance, Workers' Compensation, etc.) and not by expenditure function (i.e., Instruction, General Support, Transportation, etc.), a proration formula for instructional fringe benefits was developed. The fringe benefit expenditure portion of IE equals the sum of:
 - ▶ Instructional salaries (.15 codes in the ST-3 General Fund expense categories) multiplied by a teachers' retirement system contribution rate (.1 for NYC; .0684 for NYS);
 - ▶ Noninstructional salaries (.16 codes) multiplied by an employees' retirement system contribution rate (.0408 for NYC; .0025 for NYS);
 - ▶ A proration of the remainder of the General Fund fringe benefits, which multiplies this remainder by the ratio of total salaries under IE divided by total salaries in the General Fund; and
 - ▶ The sum of the .8 account codes which are listed under the Instruction function in the Special Aid Fund of the ST-3. The Special Aid Fund lists fringe benefits by expenditure function but not by benefit category.
4. Full Value: 1989 Full Value, from the 1991 State Aid database.
5. Income: 1989 Adjusted Gross Income, from the 1991 State Aid database.
6. Instructional Expense (IE): Computed from data extracted from the 1990-91 School Finance database as of 1/15/92, with estimations done for data missing from the 1991 State Aid database and the *Annual Educational Summary* for 1989-90 (see Appendix 1A for definition). Note that the definition differs from Instructional Expenditures reported in the *School District Fiscal Profiles* (the regulatory definition excludes: Pre-K Instructional Salaries, Health Services, Cocurricular Activities, and Interscholastic Athletics, and includes Research, Planning and Evaluation and, most importantly, an estimate of the cost of fringe benefits (see definition above) for employees whose salaries are included under the definition of IE).

7. Modified Combined Wealth Ratio: Computed by use of the standard formula for Combined Wealth Ratio (CWR), but using the Full Value and Income data as defined here, plus the 1990-91 TWPU and State averages computed directly from the above data.
8. TAPU: 1990-91 Total Aidable Pupil Units (for Expense), from the 1991 State Aid database, which is the average daily attendance with half-day K weighted at .5; secondary pupils weighted at .25; PSEN (Spring 1985 and 1986 PEP percent) weighted at .25 and summer school pupils weighted at .12 plus weighted pupils with handicapping conditions, including private school pupils weighted at 1.7. The estimated current-year attendance of pupils with handicapping conditions attending State-operated schools (Rome & Batavia) is weighted at 1.7.
9. TWPU: 1990-91 Total Wealth Pupil Units, from the 1991 State Aid database, which is defined as the 1990-91 Resident Adjusted Average Daily Attendance plus additional weightings of .25 for secondary; .25 for PSEN (Spring 1985 and 1986 PEP percent); and weightings for pupils with handicapping conditions of 1.7 for 60% of the day, .9 for 20% of the week, .8 for consultant teacher services, .13 for two periods per week, and 1.7 for private school.
10. Total Adjusted Expenditures: Grand Total Expenditures as defined in the *Fiscal Profiles*, minus expenditures for Debt Service (*Fiscal Profile* definition). Total expenditures for Debt Service were excluded because their presence frequently distorts total expenditure comparisons between districts at different stages of capital improvements, or longitudinal comparisons of expenditures of the same district over time.
11. Wealth: Unless specified otherwise, wealth or district wealth refers to the Modified Combined Wealth Ratio as computed for this study.

Additional note about pupil counts: The "per pupil" references in the tables refer to the 1990-91 Total Aidable Pupil Unit (TAPU) for Expense count from the 1991 State Aid database, **except** for the pupil count used with the Modified Combined Wealth Ratio. In this case, the "per pupil" refers to the 1990-91 Total Wealth Pupil Unit (TWPU) count from the 1991 State Aid database.

For complete descriptions of the categories used in Charts 2 and 3, please consult the *Third Annual School District Fiscal Profile Report*, published by the New York State Education Department, Fiscal Analysis and Services Unit. Some of the actual categories differ slightly in content (due to the regulatory requirements for the definition of Instructional Expense for this report). The *Profiles* definitions, in conjunction with the exceptions noted under the definition of Instructional Expense on the previous page, should suffice. Those who wish to conduct further investigation into the data used in this report are asked to submit requests in writing to: Richard J. Sauer, Associate Commissioner for Administration, New York State Education Department, Room 132A, Albany, NY 12234.

APPENDIX 1

Statutory Definitions New York State Education Law Section 3602

11. Approved operating expense. The approved operating expense for apportionments to any school district hereunder shall be computed as follows:

- a. The apportionment to any school district for operating expense shall be based upon the total expenditures from its general fund and from its capital fund and for any city school districts with a population of more than one hundred twenty-five thousand inhabitants its expenditures from the special aid fund of grant moneys for improving pupil performance and categorical aid for special reading programs as provided in the aid to localities budget during the base year as approved by the commissioner, and in accordance with the classification of expenditures in use by the commissioner for the reporting by school districts of receipts, expenditures and other financial data. For the purpose of this subdivision operating expense shall be defined as total cash expenditures during the base year, but shall exclude: (1) any balances and transfers; (2) any payments for transportation of pupils to and from school during the regular school year inclusive of capital outlays and debt service therefor; (3) any payments for capital outlay and debt service for school building purposes, provided, however, that in the case of a school district which has entered into a contract with state university pursuant to paragraph o of subdivision two of section three hundred fifty-five of this chapter, under which the school district makes payments to state university on account of capital outlay relating to certain children residing in such school district, such payments shall not be so excluded; (4) any payments for cafeteria or school lunch programs; (5) any proceeds of short term borrowings in the general fund and any payments from the proceeds of the sale of obligations in the capital fund; (6) any cash receipts which reduce the cost of an item when applied against the expenditure therefore, except gifts, donations and earned interest and any refunds made; (7) any payments made to boards of cooperative educational services and to county vocational education and extension boards for purposes or programs for which an apportionment is paid pursuant to other sections of this chapter, except that payments attributable to eligible handicapped pupils and ineligible pupils residing in noncomponent districts shall be included in operating expense; (8) any tuition payments made to other school districts inclusive of payments made to a central high school district by one of its component school districts; (9) any apportionment or payment received from the state for experimental or special programs paid under provisions other than those found in this section; (10) any funds received from the federal government; provided, however, that there shall be excluded from such federal funds or other apportionments any payments from such funds already deducted pursuant to this paragraph; (11) any payments made for which an apportionment is disallowed pursuant to regulations of the commissioner; (12) any

expenditures made for accounting, tabulation, or computer equipment, in excess of ten thousand dollars unless such expenditures shall have been specifically approved by the commissioner; (13) any rentals received pursuant to the provisions of section four hundred three-a of this chapter; (14) any rentals or other annual payments received pursuant to the provisions of section four hundred three-b of this chapter; and (15) for aid payable in the school year nineteen hundred eighty-four--eighty-five and thereafter, any expenditures made for persons twenty-one years of age or over attending employment preparation education programs pursuant to subdivision twenty-four of this section.

- 11-a. Instructional expense. a. "Instructional expense" shall mean the sum of all base year expenditures related to the instructional program of the district, as defined in regulations of the commissioner, including the cost of fringe benefits paid by such district for the instructional staff of the district.
- b. Commencing with the nineteen hundred ninety-one--ninety-two school year, school districts shall annually report instructional expense in the manner prescribed by the commissioner. By March first, nineteen hundred ninety-two, the commissioner shall report to the governor and the legislature on the relationship between instructional expense and approved operating expense in the nineteen hundred ninety--ninety-one school year.

APPENDIX 1A

Commissioner's Regulations re: Instructional Expense

Pursuant to sections 207 and 3602 of the Education Law and Chapter 53 of the Laws of 1990, section 175.39 of the Regulations of the Commissioner of Education is added, effective April 12, 1991, to read as follows:

175.39 Reporting of instructional expense.

(a) **Definition.** As used in subdivision 11-a of section 3602 of the Education Law and in this section, instructional expense shall mean the sum of all base year expenditures directly related to the instructional program in grades kindergarten through twelve of the school district, exclusive of expenditures for services provided on a full-time basis to students by a board of cooperative educational services and exclusive of tuition paid to another public school district or to an institution, other than tuition paid pursuant to a contract authorized by Article 89 of the Education Law. Such sum shall include general fund and special aid fund expenses reported in the annual financial report of the district for the following purposes:

- (1) curriculum development and supervision;
- (2) supervision - regular school;
- (3) supervision - special schools;
- (4) research, planning and evaluation;
- (5) inservice training - instruction;
- (6) teaching - regular school;
- (7) program for handicapped children;
- (8) services for pupils with special needs;
- (9) occupational education;
- (10) teaching - special schools;
- (11) school library and audiovisual;
- (12) educational television;

- (13) computer assisted instruction;
 - (14) attendance - regular school;
 - (15) guidance - regular school;
 - (16) diagnostic screening - regular school;
 - (17) psychological services - regular school;
 - (18) educationally related support services - regular school;
 - (19) social work services - regular school;
 - (20) pupil personnel services - special schools;
 - (21) employee benefits attributable to salaries included in the foregoing categories; or
 - (22) for any other purposes that shall be identified by the commissioner.
- (b) Commencing with the 1991-92 school year, school districts shall annually report base year instructional expense as defined in this section to the Commissioner on forms provided for that purpose.

APPENDIX 2

Methodology

Data used in this study were extracted from two sources: the *Basic Aid Worksheet* (SA-100) filed in August, 1991 and the *Annual Financial Report* (ST-3) for the school years 1989-90 and 1990-91. Because the due date of this report comes before the complete data files are available, some districts⁸ data were supplied by one of two estimation procedures. For those districts whose SA-100 Instructional Expense percent of total expenditures calculation was within ± 5 percentage points of the 1989-90 calculation from the ST-3, the SA-100 figures were used and total expenditures were computed from the Instructional Expense and the percent of total figure. For other districts, the 1989-90 percent of total expenditures for Instructional Expense was carried forward to 1990-91 and applied against an estimate of total expenditures for 1990-91 derived from the State Aid production file and a projection of Special Aid Fund expenditures developed from the prior year's data.

The formula for Approved Operating Expense starts with total expenditures from the General Fund and subtracts the following expenditure categories: Net Transportation; Debt Service for Building Projects; Public Library; Refund on Real Property Taxes (including any principal on debt for same); Tuition; Employment Preparation Education; Computer Hardware for Instruction; Computers for Administrative use; Restoring Leased Facilities; BOCES (other than Special Education); Payments to County Vocational Education Extension Boards; Interfund Transfers, other than to the Special Aid Fund; Transfer to the Debt Service Fund, less the total Debt Service Fund expenditures minus expenditures for Public Library; and, expenditures disallowed pursuant to Commissioner's Regulations. In addition, 22 revenue categories⁹ are also deducted.

For this study, all major public school districts¹⁰ in New York State as of July 1, 1991 were included, with the following modifications/deletions:

(1) Because the State Aid database (1991-92) and the School Finance database (1990-91) do not use the same school year for their file parameters, the recently consolidated districts of Cuba and Rushford in Allegany County were excluded.

(2) Because this report is due to the Governor and the Legislature before the data files are complete, the data for sixteen (16) districts had to be estimated. Among this list is the State's largest district, New York City.

⁸ As of 1/21/92, sixteen districts (including New York City) had not filed their complete ST-3s with the Department.

⁹ For example: continuing education tuition, admission fees, health services supplied for other districts, and youth recreation services.

¹⁰ All school districts except those with fewer than eight teachers (8 districts), nonoperating districts (1), and institutional ("Special Act") school districts (16).

APPENDIX 3

Data Tables

Tables 1 and 2 are intended to highlight the relationship between Instructional Expense and Approved Operating Expense for all districts in New York State. A common analytical tool has been used in all six tables which involves rank-ordering all districts on specific variables of interest (such as enrollment or district wealth), and then organizing the resulting rank-ordering of districts into ten groups. Each decile group of approximately 68 to 69 districts can then be compared (in terms of its average) with all other groups.

Tables 1-D, 1-U, 2-D, and 2-U use the same formats as Tables 1 and 2, respectively, but separate the districts into two geographic groupings: Downstate districts (which includes all districts in the counties of Nassau, Putnam, Rockland, Suffolk, and Westchester (excluding Yonkers); and Upstate districts (all other districts, except for the Big Five cities and the recently consolidated districts of Cuba and Rushford in Allegany County).

The Downstate sub group includes 177 districts which served 629,250 pupils in 1990-91. The Upstate sub group includes 511 districts which served 1,149,957 in 1990-91. The Big Five Cities served 1,247,802 pupils in 1990-91. The pupil counts are Total Aidable Pupil Units for Expense (see Glossary for definition).

The sources for the data contained in these tables are the School Finance data file (1989-90 and 1990-91 school years) and the State Aid Database (1992-93 aid year), with revisions through 1/23/92.

TABLE 1
ANALYSIS OF INSTRUCTIONAL EXPENSE (IE) AND APPROVED OPERATING EXPENSE (AOE)
1990-91

RANKED ON: TOTAL AIDABLE PUPIL UNITS (FOR EXPENSE)

TAPU FOR EXPENSE					***** *DECILE AVERAGES (LESS BIG 5)* *****					
UP TO DECILE #	LOWER LIMIT		UPPER LIMIT		INSTR. EXP. PER PUPIL	AOE PER PUPIL	TOTAL ADJ. EXPEND. PER PUPIL	IE AS A % OF TOTAL ADJ. EXPEND.	AOE AS A % OF TOTAL ADJ. EXPEND.	MODIFIED COMBINED WEALTH RATIO
1*	46	-	516	*	\$5,824	\$6,422	\$8,485	68.64%	75.68%	1.778
2	523	-	792	*	\$4,495	\$5,034	\$6,296	71.39%	79.95%	0.707
3	795	-	1,184	*	\$4,695	\$5,256	\$6,466	72.60%	81.27%	0.859
4	1,192	-	1,421	*	\$4,561	\$5,264	\$6,298	72.42%	83.58%	0.904
5	1,425	-	1,729	*	\$4,545	\$5,344	\$6,253	72.68%	85.46%	0.959
6	1,730	-	2,216	*	\$4,766	\$5,465	\$6,496	73.37%	84.13%	0.926
7	2,225	-	2,941	*	\$5,029	\$5,854	\$6,876	73.14%	85.14%	1.095
8	2,943	-	3,827	*	\$5,061	\$5,836	\$6,857	73.81%	85.10%	1.063
9	3,828	-	5,652	*	\$5,244	\$6,146	\$7,154	73.30%	85.91%	1.116
MAX	5,716	-	17,988	*	\$5,341	\$6,131	\$7,151	74.69%	85.73%	1.020
TOTAL STATE(LESS BIG 5)					\$5,085	\$5,868	\$6,907	73.62%	84.96%	1.028
TOTAL BIG FIVE CITIES					\$4,813	\$5,103	\$6,129	78.52%	83.26%	0.959
TOTAL STATE					\$4,973	\$5,553	\$6,586	75.50%	84.31%	1.000
*SMALLEST 10 PERCENT										
(N = 44)	K - 12 DISTRICTS				\$4,879	\$5,793	\$7,152	68.22%	81.00%	1.035
(N = 24)	NON K - 12 DIST.				\$8,892	\$8,464	\$12,814	69.39%	66.05%	3.319

TABLE 1-D: DOWNSTATE DISTRICTS

TAPU FOR EXPENSE (DOWNSTATE) *****					DECILE AVERAGES(LESS BIG 5) *****					
UP TO DECILE #	LOWER LIMIT		UPPER LIMIT		INSTR. EXP. PER PUPIL	AOE PER PUPIL	TOTAL ADJ. EXPEND. PER PUPIL	IE AS A % OF TOTAL ADJ. EXPEND.	AOE AS A % OF TOTAL ADJ. EXPEND.	MODIFIED COMBINED WEALTH RATIO
1	46	-	693	*	\$10,052	\$10,294	\$14,068	71.45%	73.17%	4.275
2	740	-	1,232	*	\$7,164	\$8,227	\$9,794	73.15%	84.00%	1.861
3	1,233	-	1,580	*	\$6,672	\$8,247	\$9,264	72.02%	89.02%	2.209
4	1,597	-	2,137	*	\$6,782	\$8,111	\$9,422	71.98%	86.08%	2.105
5	2,159	-	2,744	*	\$7,505	\$9,173	\$10,512	71.39%	87.26%	2.390
6	2,750	-	3,359	*	\$6,684	\$7,996	\$9,230	72.41%	86.63%	1.755
7	3,390	-	4,250	*	\$6,518	\$7,783	\$9,074	71.83%	85.77%	1.704
8	4,307	-	5,375	*	\$6,628	\$7,871	\$9,097	72.86%	86.51%	1.484
9	5,557	-	7,469	*	\$6,601	\$7,771	\$8,971	73.58%	86.62%	1.469
MAX	7,530	-	17,988	*	\$5,872	\$6,862	\$7,866	74.66%	87.24%	1.060
TOTAL DNSTATE(LESS BIG 5)					\$6,506	\$7,703	\$8,901	73.09%	86.54%	1.573

TABLE 1-U: UPSTATE DISTRICTS

TAPU FOR EXPENSE (UPSTATE)					***** DECILE AVERAGES(LESS BIG 5) *****					
UP TO DECILE #	LOWER LIMIT		UPPER LIMIT		INSTR. EXP. PER PUPIL	AOE PER PUPIL	TOTAL ADJ. EXPEND. PER PUPIL	IE AS A % OF TOTAL ADJ. EXPEND.	AOE AS A % OF TOTAL ADJ. EXPEND.	MODIFIED COMBINED WEALTH RATIO
1	77	-	516	*	\$4,832	\$5,547	\$7,135	67.72%	77.74%	0.887
2	523	-	732	*	\$4,231	\$4,735	\$5,937	71.26%	79.74%	0.554
3	732	-	1,022	*	\$4,134	\$4,590	\$5,758	71.81%	79.71%	0.546
4	1,034	-	1,332	*	\$4,197	\$4,780	\$5,783	72.57%	82.66%	0.653
5	1,333	-	1,542	*	\$3,937	\$4,445	\$5,400	72.91%	82.31%	0.509
6	1,559	-	1,884	*	\$4,151	\$4,709	\$5,656	73.39%	83.26%	0.595
7	1,887	-	2,441	*	\$4,115	\$4,639	\$5,531	74.40%	83.87%	0.607
8	2,463	-	3,235	*	\$4,218	\$4,757	\$5,654	74.59%	84.14%	0.637
9	3,238	-	4,791	*	\$4,364	\$4,979	\$5,874	74.29%	84.76%	0.766
MAX	4,806	-	14,251	*	\$4,497	\$5,054	\$5,991	75.07%	84.36%	0.846
TOTAL UPSTATE(LESS BIG 5)					\$4,308	\$4,864	\$5,817	74.06%	83.63%	0.713

TABLE 2
ANALYSIS OF INSTRUCTIONAL EXPENSE (IE) AND APPROVED OPERATING EXPENSE (AOE)
1990-91

RANKED ON: MODIFIED COMBINED WEALTH RATIO

MOD. COMB. WEALTH RATIO					*****DECILE AVERAGES (LESS BIG 5)*****					
UP TO DECILE #	LOWER LIMIT		UPPER LIMIT		INSTR. EXP. PER PUPIL	AOE PER PUPIL	TOTAL ADJ. EXPEND. PER PUPIL	IE AS A % OF TOTAL ADJ. EXPEND.	AOE AS A % OF TOTAL ADJ. EXPEND.	TAPU FOR EXPENSE
1	0.194	-	0.375	*	\$3,929	\$4,257	\$5,332	73.68%	79.84%	1,350
2	0.375	-	0.446	*	\$3,943	\$4,413	\$5,339	73.85%	82.65%	1,578
3	0.448	-	0.503	*	\$4,015	\$4,443	\$5,358	74.93%	82.93%	2,017
4	0.503	-	0.574	*	\$4,178	\$4,757	\$5,671	73.67%	83.88%	2,028
5	0.575	-	0.687	*	\$4,417	\$4,951	\$5,883	75.08%	84.15%	3,156
6	0.691	-	0.824	*	\$4,720	\$5,411	\$6,376	74.03%	84.88%	3,330
7	0.829	-	1.003	*	\$5,073	\$5,800	\$6,810	74.49%	85.17%	3,576
8	1.004	-	1.414	*	\$5,484	\$6,377	\$7,433	73.78%	85.79%	3,939
9	1.422	-	2.045	*	\$6,481	\$7,714	\$8,892	72.89%	86.75%	3,064
MAX	2.047	-	30.715	*	\$7,689	\$9,396	\$10,878	70.69%	86.37%	1,843
TOTAL STATE(LESS BIG 5)					\$5,085	\$5,868	\$6,907	73.62%	84.96%	2,590
TOTAL BIG FIVE CITIES					\$4,813	\$5,103	\$6,129	78.52%	83.26%	249,560
TOTAL STATE					\$4,973	\$5,553	\$6,586	75.50%	84.31%	4,374

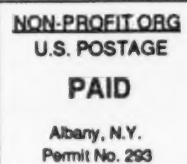
TABLE 2-D : DOWNSTATE DISTRICTS

MODIFIED CWR		(DOWNSTATE) ***** DECILE AVERAGES(LESS BIG 5) *****							
UP TO DECILE #	LOWER LIMIT	UPPER LIMIT	INSTR. EXP. PER PUPIL	AOE PER PUPIL	TOTAL ADJ. EXPEND. PER PUPIL	IE AS A % OF TOTAL ADJ. EXPEND.	AOE AS A % OF TOTAL ADJ. EXPEND.	TAPU FOR EXPENSE	
1	0.350	-	0.829 *	\$5,494	\$6,364	\$7,407	74.18%	85.92%	6,557
2	0.849	-	1.119 *	\$6,238	\$7,166	\$8,329	74.90%	86.03%	6,210
3	1.122	-	1.337 *	\$6,218	\$7,242	\$8,388	74.13%	86.34%	4,455
4	1.343	-	1.484 *	\$6,158	\$7,418	\$8,435	73.00%	87.95%	3,387
5	1.486	-	1.758 *	\$6,671	\$7,862	\$9,138	73.01%	86.04%	3,542
6	1.762	-	1.978 *	\$6,726	\$8,092	\$9,209	73.03%	87.87%	3,693
7	1.987	-	2.318 *	\$6,961	\$8,250	\$9,531	73.03%	86.56%	2,187
8	2.324	-	2.759 *	\$7,835	\$9,376	\$10,877	72.03%	86.20%	2,327
9	2.796	-	4.046 *	\$7,889	\$9,867	\$11,311	69.75%	87.24%	2,739
MAX	4.388	-	30.715 *	\$8,644	\$10,717	\$12,608	68.56%	85.00%	729
TOTAL DNSTATE(LESS BIG 5)				\$6,506	\$7,703	\$8,901	73.09%	86.54%	3,575

TABLE 2-U : UPSTATE DISTRICTS

MODIFIED CWR		(UPSTATE) ***** DECILE AVERAGES(LESS BIG 5) *****							
UP TO DECILE #	LOWER LIMIT	UPPER LIMIT	INSTR. EXP. PER PUPIL	AOE PER PUPIL	TOTAL ADJ. EXPEND. PER PUPIL	IE AS A % OF TOTAL ADJ. EXPEND.	AOE AS A % OF TOTAL ADJ. EXPEND.	TAPU FOR EXPENSE	
1	0.194	-	0.363 *	\$3,902	\$4,201	\$5,278	73.94%	79.59%	1,246
2	0.364	-	0.417 *	\$3,780	\$4,157	\$5,125	73.76%	81.12%	1,489
3	0.417	-	0.461 *	\$3,895	\$4,330	\$5,232	74.45%	82.77%	1,469
4	0.461	-	0.505 *	\$4,007	\$4,435	\$5,327	75.22%	83.25%	2,148
5	0.505	-	0.553 *	\$4,114	\$4,698	\$5,606	73.39%	83.81%	1,990
6	0.554	-	0.653 *	\$4,100	\$4,598	\$5,459	75.10%	84.23%	2,393
7	0.653	-	0.738 *	\$4,337	\$4,864	\$5,803	74.74%	83.81%	3,048
8	0.738	-	0.871 *	\$4,480	\$5,132	\$6,094	73.52%	84.22%	2,798
9	0.872	-	1.017 *	\$4,678	\$5,297	\$6,289	74.39%	84.23%	3,235
MAX	1.020	-	4.896 *	\$4,920	\$5,760	\$6,789	72.47%	84.84%	2,709
TOTAL UPSTATE(LESS BIG 5)				\$4,308	\$4,864	\$5,817	74.06%	83.63%	2,250

New York State Education Department
Albany, New York 12234



017471